

CLAIMS

5 1. A program execution method, for transferring, from an interpreter process to a compiled code process, a method that is currently being executed for code that includes a plurality of transfer points, comprising the steps of:

moving said transfer points for code to the top of a loop process when no problem occurs, even when said transfer points are moved to said top of said loop process;

10 copying to a location immediately preceding said loop process, when said transfer points are located inside said loop process, a point that post-dominates said top of said loop process and said transfer points;

15 storing information for generating recalculation code for specific transfer points when the moving of said code and privatization and a common sub-expression elimination that are performed pass beyond said specific transfer points; and

performing a recalculation during a transfer process.

20 2. The program execution method according to claim 1, further comprising a step of: defining as a new transfer point, a point from said interpreter process to said compiled code process whereat, when said method that is currently being executed is replaced, the execution speed is increased compared with when said method is not replaced.

25 3. The program execution method according to claim 1 or 2, further comprising the steps of:

generating information required to perform a transfer from said interpreter process to said compiled code process; and

storing said obtained information while correlating said obtained information with said transfer points,

wherein, at said recalculation step, said information stored for said transfer points is employed.

4. A program for transferring, from an interpreter process to a compiled code process, a method that is currently being executed for code that includes a plurality of transfer points, comprising the steps of:

moving said transfer points for code to the top of a loop process when no problem occurs, even when said transfer points are moved to said top of said loop process;

copying to a location immediately preceding said loop process, when said transfer points are located inside said loop process, a point that post-dominates said top of said loop process and said transfer points;

storing information for generating recalculation code for specific transfer points when the moving of said code and privatization and a common sub-expression elimination that are performed pass beyond said specific transfer points; and

performing a recalculation during a transfer process.